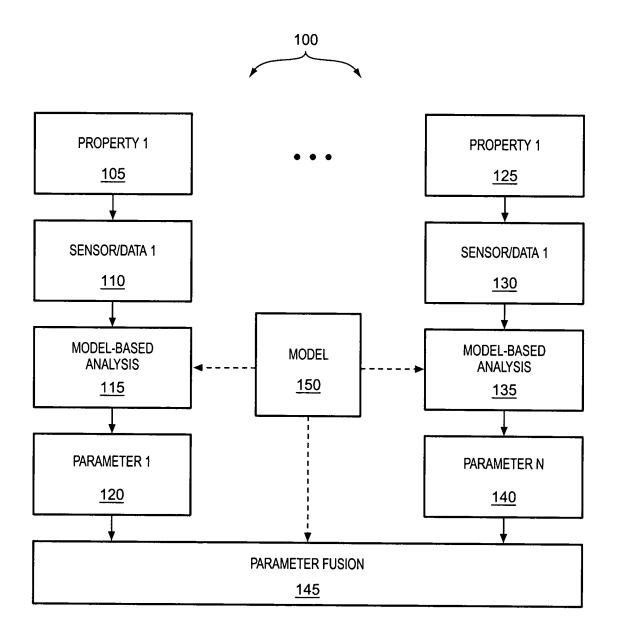
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP (303) 740-1980 Title: "Model-Based Fusion of Scanning Probe Microscopic Images for

Detection and Identification of Molecular Structures

Inventors: Haussecker, et al. Filing Date: Concurrently Herewith Express Mail No. EV 306655058 US

Sheet: 1 of 11 Attorney Docket No: 42P14242X

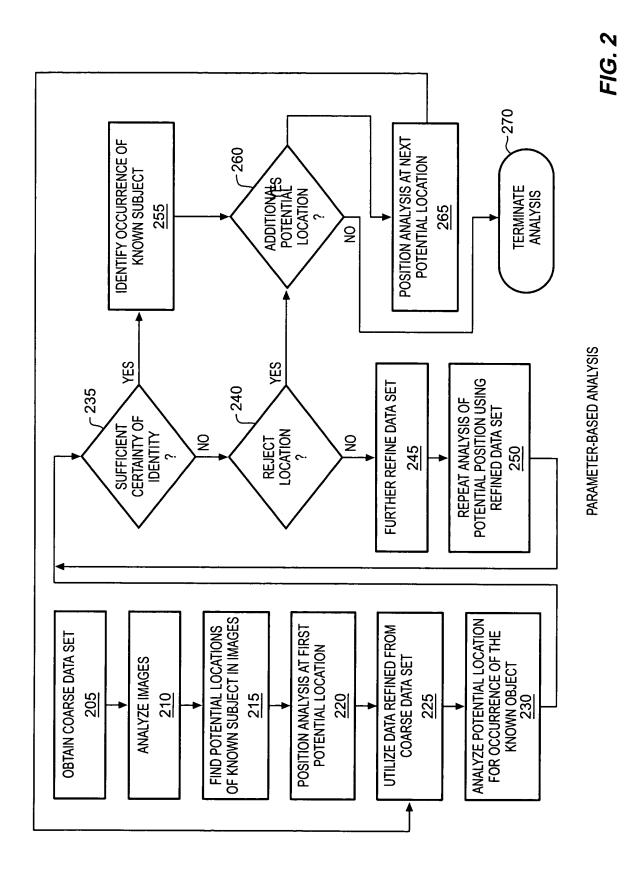


MODEL-BASED FUSION OF IMAGE PARAMETERS

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP (303) 740-1980
Title: "Model-Based Fusion of Scanning Probe Microscopic Images for **Detection and Identification of Molecular Structures**

Inventors: Haussecker, et al. Filing Date: Concurrently Herewith Express Mail No. EV 306655058 US

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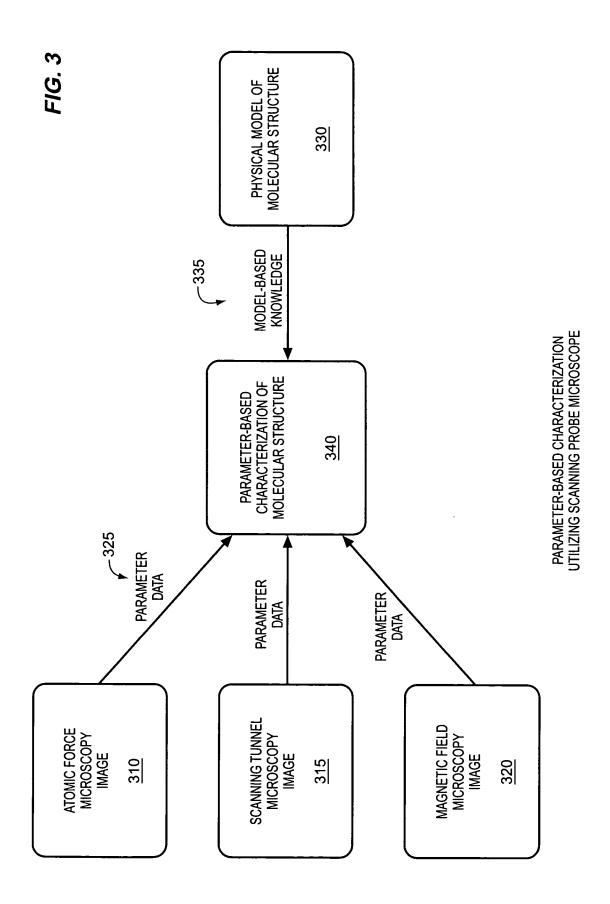


BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP (303) 740-1980 Title: "Model-Based Fusion of Scanning Probe Microscopic Images for

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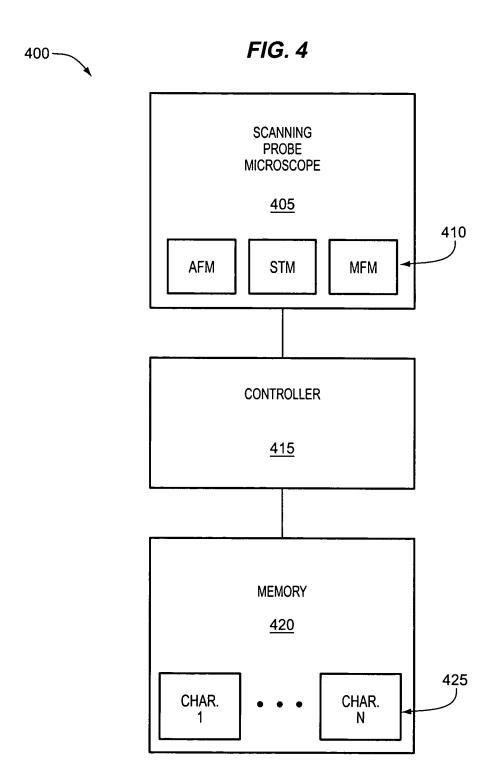
Sheet: 3 of 11 Attorney Docket No: 42P14242X



Title: "Model-Based Fusion of Scanning Probe Microscopic Images for Detection and Identification of Molecular Structures

Inventors: Haussecker, et al. Filing Date: Concurrently Herewith Express Mail No. EV 306655058 US

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IDENTIFICATION SYSTEM UTILIZING SCANNING PROBE MICROSCOPE

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP (303) 740-1980 Title: "Model-Based Fusion of Scanning Probe Microscopic Images for

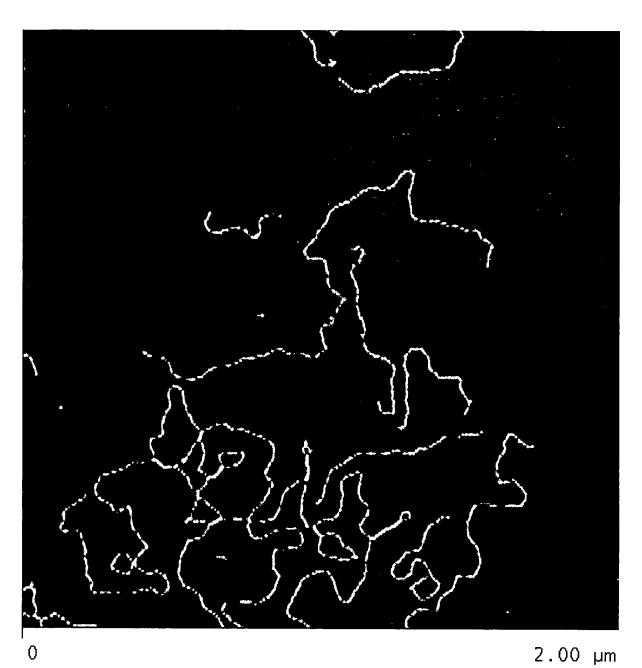
Detection and Identification of Molecular Structures

Inventors: Haussecker, et al. Filing Date: Concurrently Herewith Express Mail No. EV 306655058 US

Sheet: 5 of 11

Attorney Docket No: 42P14242X

FIG. 5



Data type Z range

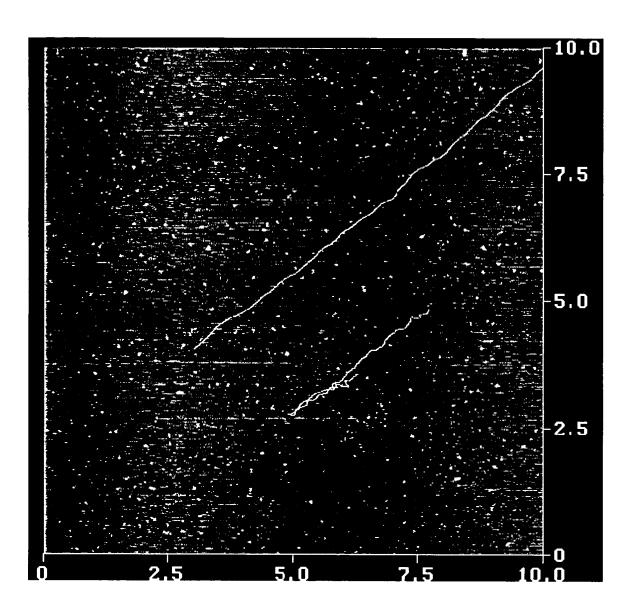
Height 1.500 nm

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP (303) 740-1980 Title: "Model-Based Fusion of Scanning Probe Microscopic Images for Detection and Identification of Molecular Structures

Inventors: Haussecker, et al.
Filing Date: Concurrently Herewith
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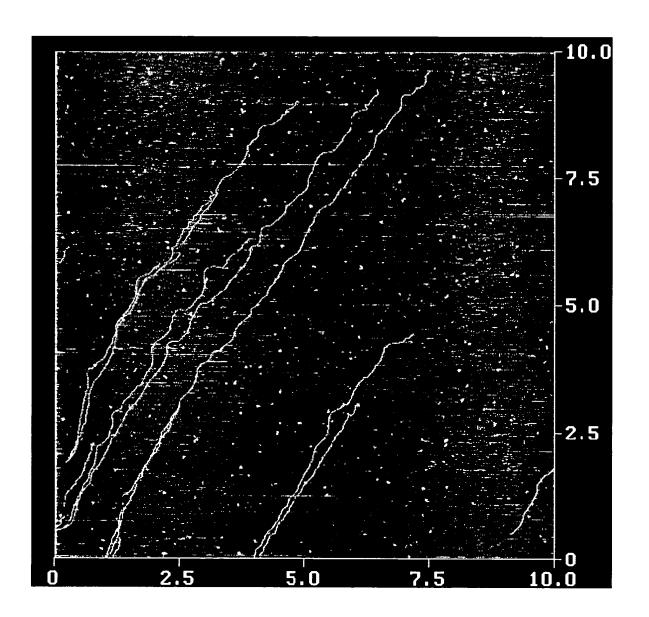
FIG. 6



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Title: "Model-Based Fusion of Scanning Probe Microscopic Images for Detection and Identification of Molecular Structures

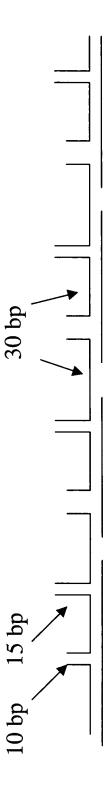
Inventors: Haussecker, et al. Filing Date: Concurrently Herewith Express Mail No. EV 306655058 US Sheet: 7 of 11

FIG. 7



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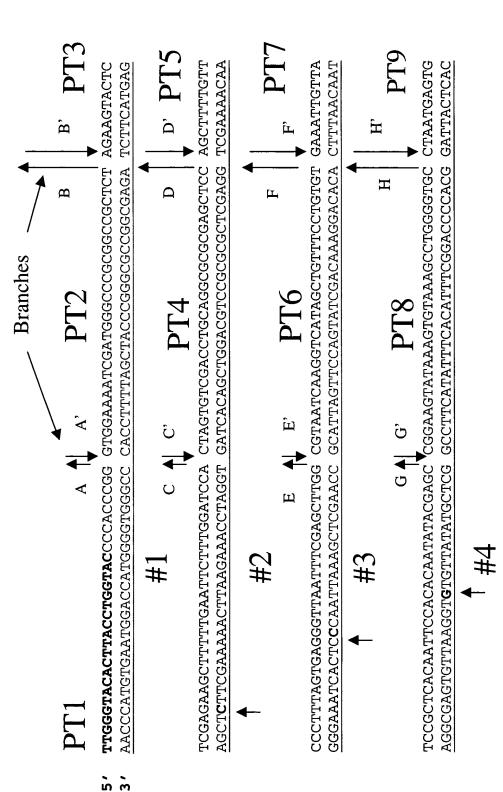
Inventors: Haussecker, et al.
Filing Date: Concurrently Herewith
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Sheet: 8 of 11



Title: "Model-Based Fusion of Scanning Probe Microscopic Images for Detection and Identification of Molecular Structures

Inventors: Haussecker, et al. Filing Date: Concurrently Herewith Express Mail No. EV 306655058 US

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AGCTAACTCACAGTAATTGCGGCTAGCGGA 3'TCGATTGAGTGTCATTAACGCCGATGGCCT 5'

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7

PT1	A TIGGGTACACTTACCTGGTACCCCACCCGG AGTTAGGGGC (SEQ ID NO:1)
PT2	A, $PT2 \ \ \mathfrak{occctaact}_{\mathtt{GTGGAAAATCGATGGGCCCGCGGCCGCTCTTATGG}\mathtt{TGCTGACTAGACCA} \ (\mathtt{SEQ} \ \mathtt{ID} \ \mathtt{NO}; \mathtt{2})$
	B, C
PT3	PT3 tegetctagtcagcaa ccata agaagtactctcgagaagctttttgaattctttggatcca tgggggggag (SEQ ID NO:3)
PT4	C' $PT4 \ \ \text{ctccgccct} \ \ \text{C}$
PT5	D' PTS tgtgccattgtccgc ccatt agcttttgttccctttagtgagggttaatttcgagcttggattgagatgc (SEQ ID NO:
PT6	E' $PT6 \ \ \textbf{gcatctcaat} \\ \textbf{CGatctcaat} \\ \textbf{CGTAATCAAGGTCATAGCTGTTTCCTGTGTTTGCATACCTTCTGCCATTCG} \ \ (SEQ \ ID \ NO:6)$
PT7	F, CGAATGGCAGAAGTA TGCAAAATTGTTATCCGCTCACAATTCCACAATATACGAGCTGCTGGGGAG (SEQ ID NO:
	G,
PT8	CTCCCCAGCACGGAAGTATAAAGTGTAAAGCCTGGGGTGCGGAATGGGCGGAATGAGACTG (SEQ ID NO:8)
	H
6 <u>1</u> ,d	PTQ acagteteatticegec $carc$ etaatgagtgagetaaetteaegtaattgeggetagegga (seq id no:9)

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP (303) 740-1980 Title: "Model-Based Fusion of Scanning Probe Microscopic Images for

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FIG. 11

